



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

June 21, 2012

Stephen Finn  
Project Coordinator  
Golder Associates Inc.  
200 Century Parkway, Suite C  
Mount Laurel, New Jersey 08054

Re: Scientific Chemical Processing Site  
Carlstadt, New Jersey, Operable Unit 3

Dear Mr. Finn:

The U.S. Environmental Protection Agency (EPA) has reviewed the revised draft final Focused Feasibility Study submitted on May 4, 2012 and the revised draft final Baseline Human Health Risk Assessment submitted on June 12, 2012, both of which relate to Operable Unit 3 (OU3) of the above-referenced site. The reports were prepared by Golder Associates Inc. on behalf of the 216 Paterson Plank Road Cooperating PRP Group. The remedial investigation and feasibility study activities are being conducted pursuant to an Administrative Order on Consent (Index No. II CERCLA-50114) dated September 30, 1985.

Enclosed are comments which we request you incorporate into revised final reports. In order to stay on schedule, please submit the revised final reports by no later than July 13, 2012. In addition, prior to submission of the revised reports, and no later than July 9, 2012, please submit a response to comments so that we may resolve any questions or concerns prior to submission of the final reports.

EPA intends to issue a proposed remedial action plan and start the public comment period for the OU3 Record of Decision on or about July 23, 2012. As such, it is imperative that the schedule outlined above be adhered to. Please call Stephanie Vaughn, the Remedial Project Manager, at 212-637-3914 if you have any questions or concerns.

Sincerely yours,

A handwritten signature in black ink, which appears to read "Carole Petersen", is written over a horizontal line.

Carole Petersen, Chief  
New Jersey Remediation Branch

Enclosures

cc: S. Vaughn, EPA

Comments  
**Draft Final Focused Feasibility Study, May 2012**  
**Scientific Chemical Processing Site, Carlstadt, New Jersey**  
**Operable Unit 3, Off-Property Groundwater**

1. *Section 2.4, Page 9* – The results are summarized on Figures 5 and 6, not Figures 5 and 8.
2. *Section 2.4.1, Page 9* – the past tense should be used in this paragraph rather than the present tense, since more recent sampling has been conducted. In particular, in the second sentence of the second paragraph of this section, “are” should be changed to “were” in reference to the highest concentrations of VOCs detected in MW-13R. Significantly higher concentrations were detected in this well during the 2009 to 2011 sampling events.
3. *Section 2.4.2, Page 10, Northern Area* – the text states that significantly higher concentrations of VOCs were detected in MW-13R in 2011 than had been detected previously, but offers no other guidance or explanation. The increasing concentrations will need to be further evaluated during the pre-design investigation. The text should state that and, if possible, offer some explanation for the increase.
4. *Section 2.4.2, Page 10, Southern Area* – the end of the first paragraph should refer to Figures 5 and 6, not Figures 5 and 8.
5. *Section 2.4.3, Pages 11 to 12* – the positive effects on groundwater quality of the OU2 remedy are not included in the discussion. Source control is another likely reason that concentrations have, in many cases, decreased over time. In addition, the increase in VOC concentrations detected in MW-13R over time runs counter to the conclusions drawn in this section. Additional sampling is required, during a pre-design investigation, to try to determine the cause and extent of this increase.
6. *Section 2.5, Page 14*
  - a. In the first sentence of this section, off-Site should be changed to off-property.
  - b. Please add a reference to the BRA.
  - c. Please add language defining RME as the maximum exposure that is reasonably estimated to occur at the site, but not the worst-case scenario, and CTE as the average exposure to an individual.
7. *Section 4.1.1, Page 18*
  - a. The text mentions that the limiting factor of continuing dechlorination may be that VOC concentrations have fallen “below levels capable of supporting dechlorinating organisms (<100 ug/l).” Please note that while this can be a factor, it is not

necessarily the limiting factor here. For example, the geochemical conditions could change in a source area, making the natural conditions less conducive to biodegradation.

- b. The text states that “concentrations of volatile compounds (in particular in monitoring wells RMW-11D, RMW-12D, and RMW-13D, see Appendix A) have declined 2-3 orders of magnitude....” In fact, concentrations in RMW-11D increased by 1 order of magnitude between 2002 and 2011, concentrations in RMW-12D declined by only 1 order of magnitude, and concentrations in RMW-13D have declined by 2 order of magnitude. The text should be modified, as appropriate.
  - c. The text refers to data from the 1990s that is not provided either in the tables or figures. The data should either be provided, or the references should be deleted.
8. *Section 5, Page 26* – the second sentence and third sentence should be combined (typo). In addition, please add the phrase “based on 2007 data” prior to (Appendix B).

Calculations of mass, as are provided in Appendix B, are just estimates and can vary based on the assumptions made. For example, if the average (target?) concentration of contaminants in the 100 to 500 ppb contour is increased from 127.4 to 400 ppb, but all other assumptions are kept the same, then the percent of mass within the 500 ppb contour decreases from 80% to 60%. Alternatively, if we assume the average concentration within each contour is at the center of the range, then the percent of mass within the 500 ppb contour is about 70%.

We are providing this comment to illustrate the importance of refining the active treatment zone both during the design, and on an on-going basis during implementation of the remedy.

9. *Sections 5.1, Page 27* – for clarity, please add an introductory sentence prior to Sections 5.1.1 and 5.1.2 stating that two elements common to both Alternative 2 and Alternative 3 are Institutional Controls and Monitored Natural Attenuation.
10. *Section 5.3.2, Page 29* – the word “during” is missing from the last sentence of the paragraph after the bullets on this page.
11. *Section 5.3.2, Page 30* – we are interested in seeing data for sodium, chloride, ethene, bromide, dissolved oxygen and other field parameters, metals, and other sampling results related to geochemical conditions and biodegradation. Please either include this information in the report, or submit it to us separately. If to be submitted separately, please let us know when it will be provided.

12. *Section 5.3.3, Page 30* – the words “initial, conceptual” should be added to the first sentence of the Northern Area part of this section, as in “The initial, conceptual treatment area includes accessible zones....” As alluded to at the start of Section 5, the active treatment area may be modified based on either the pre-design investigation and/or a review of results after the initial round or rounds of injections.
13. *Section 5.3.3, Northern Area, Page 31* – will the injections be targeted by depth or by hydrogeologic unit?
14. *Section 5.3.3, Southern Area, Page 31* – add language that the “initial, conceptual” treatment area will be within the 500 ug/l iso-concentration contour. As with the northern area, this treatment zone will need to be refined during the pre-design investigation and/or during implementation of the remedy.
15. *Section 8.0, Page 44* – after the bulleted list of alternatives, state that all of them include both MNA and ICs.
16. *Section 9* – RAGS Parts A and B should be included as references.
17. *Appendix A, Page A-9* – this text of this section should include the description of how the scores are interpreted, as is provided as a footnote to Table A-1.

**Comments**  
**Draft Final Baseline Human Health Risk Assessment, June 2012**  
**Scientific Chemical Processing Site, Carlstadt, New Jersey**  
**Operable Unit 3, Off-Property Groundwater**

1. *Title and throughout document* – The report should refer to Operable Unit 3, off-property groundwater, not deep groundwater.
2. *Page 2, First (partial) paragraph on page* – We suggest re-writing the last sentence of this paragraph as follows:

Although current risk assessment approaches are designed to be health protective and conservative, and may overestimate risk, they provide a systematic method that allows public health policy makers to estimate the relative risks posed by various environmental substances and potential exposure pathways.

3. *Page 24, Application of ADAF Values to Evaluation of Mutagenic COPCs* – while no change is needed, please note that the calculation of TCE ADAFs provided may be an overestimate, since they did not include the relative risks from kidney cancer and non-Hodgkins lymphoma. The difference should not, however, be significant. EPA will re-run the calculation and create a memo to file, for the record. Also note that there is a typo in the heading of this section.